

Idaho Department of Environmental Quality Draft §401 Water Quality Certification

June 9, 2017

404 Permit Application Number: NWW-2004-0600046

Applicant/Authorized Agent: David Kuisti, Idaho Transportation Department

Project Location: US Hwy 95 between Mile Posts 337 and 344. Latah County, near

Moscow, Idaho

Receiving Water Body: several unnamed tributaries and associated wetlands of the

South Fork Palouse River and Thorn Creek.

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue water quality certification decisions.

Based upon its review of the joint application for permit, received on May 18, 2017, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

Project Description

This project will discharge 4,373 cubic yards of road fill materials (rock, dirt, gravel) permanently filling 3.43 acres of wetlands, and discharge approximately 620 cubic yards of road fill material below the ordinary high water mark of five unnamed tributaries and drainages of the South Fork Palouse River and Thorn Creek, for the construction of 6.34 miles of new 4-lane divided highway for US 95, between Mile Posts 337.67 and 344.00. Five tributaries and drainages will be crossed with the new alignment, resulting in the piping of 4,290 linear feet of unnamed tributaries and drainages. The proposed project will construct 4,030 linear feet of drainages on-site, adjacent to the new roadway. Sixteen culverts will convey drainage water under the new highway. The project also includes temporary fill of 0.25 acres of wetlands and tributaries and drainages, the removal of vegetation for construction access, or the placement and use of temporary cofferdams and flume pipes for temporary dewatering, when necessary.

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Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier I Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier II Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).
- Tier III Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for that use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

The primary pollutants of concern for this project are sediment, nutrients, and temperature. As part of the Section 401 water quality certification, DEQ is requiring the applicant comply with various conditions to protect water quality and to meet Idaho WQS, including the water quality criteria applicable to sediment, nutrients and temperature.

Receiving Water Body Level of Protection

This project is located on tributaries of the South Fork Palouse River and Thorn Creek within the Palouse Subbasin hydrologic unit (HUC) 17060108. The South Fork Palouse River Assessment Unit (AU) ID17060108CL002_02 (South Fork Palouse River - Gnat Creek to ID/WA border) has the following designated beneficial uses: cold water aquatic life, salmonid spawning and secondary contact recreation. The Thorn Creek AU ID17060108CL001_02 (Cow Creek - source to Idaho/Washington border) has the following designated beneficial uses: cold water aquatic life and secondary contact recreation. In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

According to DEQ's 2014 Integrated Report, AU ID17060108CL002_02 the cold water aquatic life, salmonid spawning and secondary contact recreation beneficial uses have not been assessed;

however the applicant has agreed to assume that these tributaries to the South Fork Palouse River are of high quality (Phone Conversation with Shawn Smith ITD 6/08/17). As such, DEQ will provide Tier II protection in addition to Tier I for the cold water aquatic life, salmonid spawning and contact recreation uses of the South Fork Palouse River tributaries. (IDAPA 58.01.02.051.02; IDAPA 58.01.02.051.01).

In addition, the 2014 Integrated Report showed the Thorn Creek AU ID17060108CL001_02 as not supporting one or more of its assessed uses. The aquatic life use is not fully supported. Causes of impairment include nutrients and physical substrate habitat alterations. The contact recreation beneficial use is fully supported. As such, DEQ will provide Tier I protection (IDAPA 58.01.02.051.01) for the aquatic life use and Tier II protection (IDAPA 58.01.02.051.02) in addition to Tier I for the contact recreation use (IDAPA 58.01.02.051.01).

Protection and Maintenance of Existing Uses (Tier I Protection)

As noted above, a Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. The numeric and narrative criteria in the WQS are set at levels that ensure protection of existing and designated beneficial uses.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load must be prepared for those pollutants causing impairment. Once a TMDL is developed, discharges of causative pollutants shall be consistent with the allocations in the TMDL (IDAPA 58.01.02.055.05). Prior to the development of the TMDL, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04).

The US Highway 95 construction project will be consistent with the South Fork Palouse River TMDL and the Cow Creek Subbasin TMDL waste load allocations for sediment, nutrients, and temperature listed pollutants. During the construction phase of the project, the applicant will implement, install, maintain, monitor, and adaptively manage best management practices (BMPs) directed toward reducing erosion and minimizing turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented, which will minimize or prevent future sediment contributions from the project area. Since sediment and excess nutrients binding to sediment can impact the cold water aquatic life and contact recreation beneficial uses, the permittee will minimize sediment transport by dewatering the construction site by placing temporary cofferdams and flume pipes around active project locations. Upon completion of instream and earth work, re-watering of the new stream channel will occur slowly to minimize erosion and turbidity and allow fines to fill voids in the new channel bed.

In order to comply with the South Fork Palouse River TMDL load allocations for temperature and protect or improve stream conditions, restored riparian plant communities and stream channels will be constructed. Based on the proposed design specifications, project activities are not expected to contribute thermal loading sources of temperature to the South Fork Palouse River and Thorn Creek tributaries. Any trees or riparian vegetation that is removed will be replanted with native riparian plant species to form a viable functioning riparian community. This requirement includes irrigating new plantings and securing water for long term

maintenance. The use of non-native willow trees and reed canary grass is not considered a viable riparian plant community.

As long as the project is conducted in accordance with the provisions of the project plans, Section 404 permit, the South Fork Palouse River and Cow Creek TMDLs, and conditions of this certification, then there is reasonable assurance the project will comply with the state's numeric and narrative criteria set at levels to protect and maintain designated beneficial uses.

There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated and discussed above; therefore, the permit ensures that the level of water quality necessary to protect both existing and designated uses is maintained and protected in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

High-Quality Waters (Tier II Protection)

The South Fork Palouse River and Thorn Creek is considered high quality for secondary contact recreation. As such, the water quality relevant to this use must be maintained and protected, unless a lowering of water quality is deemed necessary to accommodate important social or economic development.

To determine whether degradation will occur, DEQ must evaluate how the permit issuance will affect water quality for each pollutant that is relevant to secondary contact recreation uses of the South Fork Palouse River and Thorn Creek (IDAPA 58.01.02.052.06). These pollutants include the following: nutrients, which bind to sediment particles. To prevent sediment and associated nutrients from entering the South Fork Palouse River and Thorn Creek, the permittee will place temporary cofferdams and flume pipes around active project locations to divert the stream around the project areas. In addition, the permittee will minimize the transport of sediment through the implementation of best management practices (BMPs). Any trees or riparian vegetation that is removed will be replanted with native riparian plant species to form a viable functioning riparian community which will prevent long term erosion issues. Permanent erosion and sediment controls must be implemented that will minimize or prevent future sediment contributions from the project area. The provisions in the 404 permit, coupled with the conditions of this certification, ensure that degradation to the South Fork Palouse River tributaries and Thorn Creek will not occur. Therefore, DEQ concludes that this project complies with the Tier II provisions of Idaho's WQS (IDAPA 58.01.02.051.02; 58.01.02.052.06 and 58.01.02.052.08).

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

General Conditions

1. The proposed project shall be constructed in a manner that will not violate Idaho's Water Quality Standards as set forth in IDAPA 58.01.02.

- 2. DEQ reserves the right to modify, amend, or revoke this certification if DEQ determines that, due to changes in relevant circumstances including without limitation, changes in project activities, the characteristics of the receiving waterbodies, or state WQS there is no longer reasonable assurance of compliance with WQS or other appropriate requirements of state law.
- 3. If ownership of the project changes, the certification holder shall notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person or party. The new owner/operator shall request, in writing, the transfer of this water quality certification to his/her name.
- 4. The applicant is responsible for all work done by contractors and must ensure the contractors are informed of and follow the conditions described in this certification and the section 404 permit.
- 5. If this project disturbs more than 1 acre and there is potential for discharge of stormwater to waters of the state, coverage under the EPA Stormwater Construction General Permit must be obtained. More information can be found at http://yosemite.epa.gov/R10/WATER.NSF/NPDES+Permits/Region+10+CGP+resources

Fill Material

- 1. Fill material subject to suspension shall be free of easily suspended fine material. The fill material to be placed shall be clean material only.
- 2. Fill material shall not be placed in a location or in a manner that impairs surface or subsurface water flow into or out of any wetland area.
- 3. Placement of fill material in existing vegetated wetlands shall be minimized to the greatest extent possible.
- 4. Excavated or staged fill material must be placed so it is isolated from the water edge or wetlands and not placed where it could re-enter waters of the state uncontrolled.

Erosion and Sediment Control

- 1. All practical best management practices (BMPs) on disturbed banks and in waters of the state must be implemented to minimize turbidity. Turbidity shall not exceed background turbidity by more than 50 NTU instantaneously or more than 25 NTU for more than 10 consecutive days. BMP effectiveness shall be monitored during project implementation.
- 2. Visual observation is acceptable to determine whether BMPs are functioning properly. If a plume is observed, the project may be causing an exceedance of WQS and the permittee must inspect the condition of the project's BMPs. If the BMPs appear to be functioning to their fullest capability, then the permittee must modify the activity or implement additional BMPs which may also include modifying existing BMPs.
- 3. One resource that may be used in evaluating appropriate BMPs is DEQ's *Catalog of Stormwater Best Management Practices for Idaho Cities and Counties*, available online at http://www.deq.idaho.gov/media/494058-entire.pdf. Other resources may also be used for selecting appropriate BMPs.

- 4. Erosion and sediment control measures shall be installed in a manner that will provide long-term sediment and erosion control to prevent excess sediment from entering waters of the state.
- 5. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
- 6. Disturbed areas suitable for vegetation shall be recontoured, reseeded or revegetated to prevent subsequent soil erosion.
- 7. Maximum fill slopes shall be such that material is structurally stable once placed and does not slough into the stream channel during construction, during periods prior to revegetation, or after vegetation is established.

In-water Work

- 1. Work in open water is to be kept at a minimum and only when necessary. Construction affecting the bed or banks shall take place only during periods of low flow or when stream diversion is in place.
- 2. Fording of the channel is not permitted. Temporary bridges or other structures shall be built if crossings are necessary.
 - a. Temporary crossings must be perpendicular to channels and located in areas that will result in the least impact. The temporary crossings must be supplemented with clean gravel or treated with other mitigation methods at least as effective in reducing impacts. Temporary crossings must be removed as soon as possible after the project is completed or the crossing is no longer needed.
- 3. To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.
- 4. Removal of coffer dam straw bales/wattles, sediment traps and the re-watering of stream must be done in slow increments to prevent an instant elevation of sediment transport.

Pollutants/Toxics

1. The use of chemicals such as soil stabilizers, dust palliatives, sterilants, growth inhibitors, fertilizers, and deicing salts during construction and operation should be limited to the best estimate of optimum application rates. All reasonable measures shall be taken to avoid excess application and introduction of chemicals into waters of the state.

Vegetation Protection and Restoration

- 1. Disturbance of existing riparian and native vegetation shall be kept to a minimum. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
- 2. If authorized work results in unavoidable vegetative disturbance, riparian and wetland vegetation shall be successfully reestablished to function for water quality benefit at preproject levels or improved at the completion of authorized work.

Management of Hazardous or Deleterious Materials

1. Adequate measures and controls must be in place to ensure that petroleum products and hazardous, toxic, and/or deleterious materials will not enter waters of the state.

- 2. Equipment and machinery must be moved to an upland area prior to refueling, repair, and/or maintenance.
- 3. Emergency spill procedures shall be in place and should include a spill response kit (e.g., oil absorbent booms or other equipment).
- 4. In accordance with IDAPA 58.01.02.850, in the event of an unauthorized release of hazardous material to state waters or to land such that there is a likelihood that it will enter state waters, the responsible persons in charge must
 - b. Make every reasonable effort to abate and stop a continuing spill.
 - c. Make every reasonable effort to contain spilled material in such a manner that it will not reach surface or ground waters of the state.
 - d. Call 911 if immediate assistance is required to control, contain, or clean up the spill. If no assistance is needed in cleaning up the spill, contact the Lewiston regional office at 208-799-4370 or 1-877-541-3304 during normal working hours or Idaho State Communications Center after normal working hours (1-800-632-8000). If the spilled volume is above federal reportable quantities, contact the National Response Center (1-800-424-8802).
 - e. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.

Culverts

- 1. To prevent road surface and culvert bedding material from entering a stream, culvert crossings must include best management practices to retain road base and culvert bedding material. Examples of best management practices include, but are not limited to, parapets, wing walls, inlet and outlet rock armoring, compaction, suitable bedding material, antiseep barriers such as bentonite clay, or other acceptable roadway retention systems.
- 2. The culvert shall not constrict the stream channel and shall not be angled such that the outflow is directed toward the stream bank. The culvert's flow line shall match the existing stream invert at its entrance and exit. Adequate grade control shall be installed to prevent channel down cutting or excessive deposition from occurring.
- 3. The culvert shall be installed such that it does not impede fish passage.
- 4. The culvert outflow shall be armored with riprap to provide erosion control. This riprap will be clean, angular, dense rock that is free of fines and resistant to aquatic decomposition.
- 5. Culverts shall be sized appropriately to maintain the natural drainage patterns.

Mixing Zones

1. If a mixing zone, or alternatively a point of compliance is desired, then the permittee must contact the appropriate DEQ regional office to obtain authorization.

Right to Appeal Final Certification

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the "Rules of Administrative Procedure before the Board of Environmental Quality" (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to Mark Sellet at (208) 799-4370 or email at mark.sellet@deq.idaho.gov.

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John Cardwell Regional Administrator Lewiston Regional Office